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Office Action Summary	Application No.	Applicant(s)	
	10/789,146	RUBACH, JAMES E.	
	Examiner	Art Unit	
	Sang Nguyen	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/19/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I (claims 1-6 and 18 in the reply filed on 03/14/06 is acknowledged.

Oath/Declaration

The oath/declaration filed on 05/19/04 is acceptable.

Response to Amendment

Applicant's response to amendment filed on 03/14/06 has been entered. It is noted that the application contains claims 1-6 and 18 and claims 7-17 have been canceled by the amendment on 03/14/06.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 5/19/04 has been entered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 and 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Bednarz et al (U.S. Patent No. 5,294,912 submitted by applicant).

Regarding claim 1; Bednarz et al discloses a method of detecting the position of a foot, comprising the steps of:

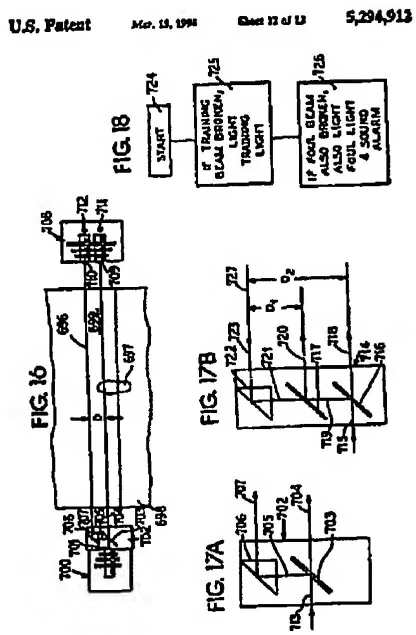
(a) providing a plurality of light beams (704, 707 of figure 16 or 16 of figure 1) from a laser unit (700 of figure 16 or 17 of figure 1);

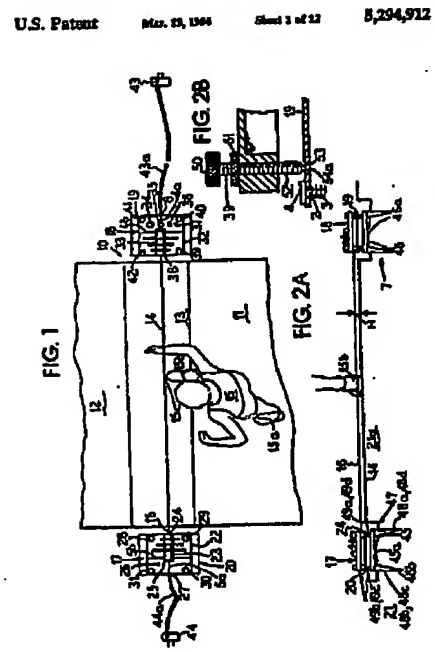
(b) providing a plurality of light detectors (709, 710 of figure 16) by a detecting device unit (708 of figure 16 or 18 of figure 1) for sensing said plurality of light beams (704, 707 of figure 16);

(c) enabling at least one light beam of said plurality of light beams at a time by an LED indicator and a off/on switch (25, 26 of figure 1 and col.4 lines 22-30) of the laser unit (17 of figure 1), enabling at least one light detector (18 of figure 1) corresponding to said at least one light beam (16 of figure 1);

(d) indicating the presence or absence of each one of said plurality of light beams (704, 707 of figure 16) by the detecting device unit (18 of figure 1 or 708 of figure 16) couled to a computer (78 of figure 7); and

(e) displaying the position of a foot (697 of figure 16) during a jump takeoff. See figures 1-18.





Regarding claim 5; Bednarz et al discloses storing the presence or absence of each of said plurality of light beams in a memory (figures 6A, 8, 9A-9C, and 10A-10B)

Regarding claim 6; Bednarz et al discloses recalling said presence or absence of each of said plurality of light beams from said memory by a recall switch activation (34, 35,36, 37 of figure 1 and col.4 lines 34-55).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bednarz et al (U.S. Patent No. 5,294,912 submitted by applicant) in view of Stroman et al (U.S. Patent No. 5,077,477).

Regarding claim 2; Bednarz et al discloses all of features of claimed invention except for collimating each one of said plurality of light beams, and collimating each one of said plurality of light detectors. However, Stroman et al teaches that it is known in the art to provide collimating each one of said plurality of light beams (30 of figure 3) by a collimating device (48 of figure 3), collimating each one of said plurality of light detectors (32 of figure 3) by collimating device (42 of figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with collimating each one of said plurality of light beams, and collimating each one of said plurality of light detectors as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams.

Regarding claim 3; Bednarz et al discloses all of features of claimed invention except for placing an aperture in front of each one of said plurality of light beams and light detectors. However, Stroman et al teaches that it is known in the art to provide placing an aperture (40, 46 of figure 3) in front of each one of said plurality of light beams (28 of figure 3) and light detectors (32 of figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with placing an aperture in front of each one of said plurality of

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light beams and light detectors as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams.

Regarding claim 4; Bednarz et al discloses all of features of claimed invention except for enabling said plurality of light beams and said plurality of light detectors sequentially. However, Stroman et al teaches that it is known in the art to provide enabling said plurality of light beams (28, 30 of figure 3) and said plurality of light detectors sequentially (23, 34 of figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with enabling said plurality of light beams and said plurality of light detectors sequentially as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams.

Regarding claim 18; Bednarz et al discloses a jump takeoff position indicator system, comprising of:

an infrared light beam emitting device considered to be a laser unit (700 of figure 16 or 17 of figure 1) for emitting a plurality of infrared light beams (704, 707 of figure 16);

an infrared light beam detecting device considered to be a detecting unit a detecting device unit (708 of figure 16 or 18 of figure 1) for sensing the presence of said plurality of light beams (704, 707 of figure 16);

a synchronization means for (figures 6-11) synchronizing the emission of the plurality of infrared light beams (704, 707 of figure 16) with the detection of the light beams by the infrared light beam detecting device;

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a displaying means (figure 7) considered to be a LCD display (79 of figure 7) coupled to coupled to a computer (78 of figure 7) for indicating the presence or absence of each one of said plurality of light beams (704, 707 of figure 16);

a memory considered to be a power supply switch (67 of figure 6A) coupled to a low battery detector circuit (72 of figure 6A), LED flasher circuit (71 of figure 6A) and coupled to an auto shut-down circuit (70 of figure 6A) for storing the status of the plurality of infrared light beams (704, 707 of figure 16)at the moment of takeoff of the foot697 of figure 16); and

a recall switch (34, 35,36, 37 of figure 1 and col.4 lines 34-55) of the detecting unit (18 of figure 1) coupled to computer (78 of figure 7) for recalling and displaying the status on the display means, wherein the foot position of a foot (697 of figure 16) during a jump takeoff. See figures 1-18.

Bednarz et al discloses all of features of claimed invention except for a collimating means for collimating the emission and detection of the plurality of infrared light beams. However, Stroman et al teaches that it is known in the art to provide a collimating means (42, 48 of figure 3) for collimating the emission and detection of said plurality of infrared light beams . It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with means for collimating the emission and detection of the plurality of infrared light beams as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams..

Conclusion

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Art Unit: 2877

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Verga (6782118) discloses system for measuring; Squadron et al (6167356) discloses system for measuring a jump; Tipton et al (6181647) discloses vertical jump measuring device; Holland et al (long jump training apparatus; Borchers er al (5753931) discloses object imaging device and method; Nakamura et al (5625191) discloses scintillation camera and sensor; Carlin (4774679) discloses stride evaluation system; Gordon (4168061) discloses athletes long jump pit; Erikson (4089057) discloses method and device for measuring jump-length on a ski-jump.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 25, 2006

Sang Nguyen
Patent Examiner
Art Unit 2877